

## **PACKAGING FOR SMOKING ARTICLES**

### **BACKGROUND OF THE INVENTION**

#### **Field of the Invention**

[0001] The present invention relates to smoking articles such as tobacco products and packaging therefore, and more particularly to an improved package-based accessory providing enhanced convenience features for use with smoking articles.

#### **Description of the Related Art**

[0002] Smoking articles such as cigarettes and cigarillos (hereinafter "cigarettes") are commonly sold in prepackaged, sealed boxes or packs sized and shaped to fully receive a plurality of cigarettes, secured for dispensing when the box and interior protective wrapping is opened. Such containers have a depth sufficient to receive a substantial portion of the cigarette within a lower body portion thereof, with an upper body portion operable, typically via a hinged support, to enable access to a cigarette contained therein. Commonly, such cigarette packs are configured to receive 20 cigarettes, although cigarette packs containing lesser or greater numbers of cigarettes are known.

[0003] According to the related art, cigarette packs are packaged with inner and outer protective envelopes for preserving a rather narrow tobacco moisture range necessary to maintain acceptable taste and burn characteristics. Such inner

protective envelope may include an inner protective paper, foil, or hybrid/laminate sheet for bundling and sealing the packaged cigarettes during transport and shipment as well as retail display and storage. The protective sheet is readily breached by the smoker at the appropriate time to give access to one or more of the bundled cigarettes. The cigarette pack configured to receive the cigarette-containing package is commonly comprised of a cardboard structure, having a lower cigarette-receiving portion and a hinged top portion, for cigarette packaging known as "hard-packs". The so-assembled cigarette pack and protective-sheet clad cigarette bundle is then provided with a fully enveloping and sealing over-wrap such as a Mylar or cellophane layer, to further assure maintenance of the bundled cigarettes against moisture and taste loss. The over wrapping may optionally be provided with tear strips for providing easy access to the interior of the cigarette pack.

[0004] It is of course necessary to provide an ignition source to light each and every cigarette retrieved from the cigarette pack. A major inconvenience known to virtually all smokers is the absence by misplacement or loss of an ignition source such as commonly known, widely available and inexpensive incendiary matches. Such matches are typically provided in booklet form as a convenience at the point-of-sale of the cigarettes themselves, and pocketed by the smoker for future use. Some smokers rely instead on personal butane lighters instead of matches provided in matchbook form. It is widely known that personal butane lighters are commonly sold as an additional accessory at a small but quantifiable cost, adding further expense to the smoking experience. No matter what the ignition source, however, the ignition source remains loosely retained by

the smoker with the risk of loss or misplacement until, for example, a sufficient number of cigarettes have been removed to allow for storage of the ignition source within the partially-emptied cigarette pack.

5     **[0005]**       In an effort to readily provide an ignition source in connection with a cigarette pack, it is known in the art to provide a cigarette pack carrier or caddy that attaches to a pack of cigarettes or has a receptacle to receive the pack, and also has a receptacle for a cigarette lighter. See, for example U.S. Pat. Nos. 4,000,812--Pisarski et al.; 4,190,148--Schade, II et al.; 4,588,076--Caputo et al.;  
10     and 4,750,613--Kopp disclose various devices for carrying both a cigarette lighter and pack of cigarettes.

15     **[0006]**       In particular, cigarette pack and lighter caddies are advantageous in that they keep the pack and the lighter associated, but require that the smoker carry an additional piece of smoking paraphernalia. Thus, it is nearly as easy to misplace a caddy (particularly when empty) as to misplace a lighter. Additionally, many pack/lighter caddies are bulky, making them less than desirable for carrying in a smoker's pocket or purse. It would be advantageous if a more convenient and inexpensive way could be provided for smokers to carry their cigarette lighters  
20     along with their cigarette packs, without having to purchase and retain a separate carrier device.

25     **[0007]**       Therefore, what is needed is a combined cigarette pack and ignition source that overcomes these problems.

### Summary of the Invention

[0008] Accordingly, it is an object of the present invention to provide an improved combined cigarette pack and ignition source for readily providing to the smoker an ignition source that is not only convenient to use but which provides the smoker with cigarette packaging including a readily apparent, easily used, and package-protected ignition source.

[0009] It is another object of the present invention to provide such packaging sufficient to light the entire population of cigarettes packaged within the cigarette pack.

[0010] It is a further object of the present invention to provide such packaging as an integrated portion of the construction of the cigarette pack.

[0011] It is yet another object of the present invention to provide such packaging with at most a nominal increase in packaging cost, thereby overcoming the need and expense of prior art detached ignition sources.

[0012] These and other object and advantages are obtained with an integrated cigarette pack that either incorporates (according to one preferred embodiment) or integrates (according to another preferred embodiment) a plurality of ignition matches within a concavity provided behind the front panel of the cigarette pack, providing to the smoker sufficient access to the base of the match for detachment from the cigarette pack. In the closed, packaged condition, the

matches are fully secured within the cigarette pack beneath the pack cover. Prior to retail sale, the Mylar or cellophane over-wrap maintains the integrity of the matches by preventing ingress of moisture or other environmental elements. During use, the pack cover is hingedly opened away from the pack body, exposing both the cigarettes contained therein as well as the matches. The smoker detaches a match from the cigarette pack and lights it on a strike pad provided on the pack body or pack cover, whether internally or externally, and which may be positioned on a top, bottom, front, rear, or side panel.

[0013] The invention will be better understood upon a reading of the following specification, read in conjunction with the accompanying drawings.

#### Brief Description of the Drawings

[0014] Fig. 1 is a perspective view of a cigarette pack according to a first preferred embodiment of the present invention, showing the pack in an open, accessible position for providing the smoker with access to cigarettes as well as matches for use in the conventional manner.

[0015] Fig. 2 is a perspective view of the cigarette pack of Fig. 1, shown in the closed position and wrapped for retail display and sale in a protective outer layer.

[0016] Fig. 3 is a perspective view, partly broken, of the open cigarette pack shown in Fig. 1, further showing a smoker retrieving a match therefrom.

[0017] Fig. 4 is a schematic view of the open cigarette pack shown in Fig. 3, further showing the smoker striking the retrieved match on a strike plate secured on the bottom of the cigarette pack.

5 [0018] Fig. 5 is a cross-sectional view of the cigarette pack shown in Fig. 1, in which the over-wrap has been removed and the pack cover is brought to a raised position to expose the cigarettes and matches for retrieval by the smoker.

[0019] Fig. 6 is a perspective view, partly broken, of the open cigarette pack  
10 according to a second preferred embodiment of the present invention.

[0020] Fig. 7 is a cross-sectional view of the cigarette pack shown in Fig. 6, in which the over-wrap has been removed and the pack cover is brought to a raised position to expose the cigarettes and matches for retrieval by the smoker.

#### Detailed Description of the Invention

[0021] With reference now to the drawings, Figs. 1-5 show the integrated cigarette pack and match assembly 10 of the present invention, including a cigarette pack 12, according to a first embodiment of the present invention.

20 Cigarette pack 12 has a pack cover 14 defining a first concavity 16, and a pack body 18 defining a second concavity 20. Pack body 18 includes front wall 22, a back wall 24, side walls 26, and a bottom wall 28. An inner sleeve 30 is sized and shaped to be entirely received within the second concavity 20 of pack body 18, for fully receiving a bundle of cigarettes 32 previously wrapped in a protective sheath  
25 or wrap 34, as well as providing additional rigidity to the cigarette pack 12. The

cigarette pack 12 including inner sleeve 30 is constructed so as to provide a sturdy, secure structure comprised of a laminated paper or paperboard material in a rectilinear box shape for holding a plurality of cigarettes, the paperboard material being typically cut or formed from 0.012 inch thick sheet. Definitively, the term  
5 paperboard describes the paper within the thickness range of 0.008 to 0.028 inches. So constructed, the cigarette pack 12 will accommodate twenty cigarettes although cigarette packs with greater or lesser capacity are contemplated for use with the present invention. Prior to use, an outer sheath 36 is formed of a barrier sheet material such as a metal foil/plastics laminate, Mylar or cellophane wrap, or  
10 a metallized plastics film. The cigarette pack 12 is thus sealed to form an enclosure thereabout to provide a hermetic seal during shipment and storage and prior to retail sale and opening by the end-user smoker 11.

[0022] According to the invention, a plurality of matches 40 are secured to  
15 the cigarette case 12. Specifically, each match 40 includes a shaft 42 supporting a match head 44 at one end thereof to which an ignitable material is deposited. The ignitable material is activated by frictional contact when struck on an abrasive strike strip 46 secured to a planar surface of the cigarette pack 12, either at an exterior surface of the pack body 18 (including front wall 22, back wall 24, side  
20 walls 26, or bottom wall 28) or an interior or exterior surface of pack cover 14. As will be appreciated by the skilled artisan, the strike strip 46 so provided will be encased by outer sheath 36 during shipping and storage, thereby protecting and preserving its frictional qualities prior to use.

25 [0023] Each shaft 42 are joined at an opposite end to a common base 42, for

ready separation therefrom as by tearing either at an intermediate portion of the shaft 42 or along a perforated tear line provided adjacent the common base 42 to provide maximum handling length without compromising the integrity of the common base 42. A plurality of matches 40 are thus provided on common base 42, and are sized and shaped to afford easy access and handling. For those instances where the cigarette pack 12 is configured to contain twenty cigarettes, it is preferable that twenty-two matches 40 be provided on the common base 42. However, it will be apparent that a plurality of common bases 42 are required to support at least 22 matches 40, and accordingly, two common bases 42 each containing at least eleven matches 40 will be selected for use with the invention. Thus configured, the common bases 42 are sandwiched together for use in the manner further described below. For a cigarette pack 12 configured to receive a lesser number of cigarettes 32, one or more common bases 42 may be used as desired to provide a sufficient number of matches 40 necessary to compliment the so-contained cigarettes. It will be further appreciated that an additional reserve number of matches 40, in addition to the number of resident cigarettes 32, may be provided to account for flame-outs or other needs.

[0024] According to the invention, the match-mounted bases 42 are received within a concavity 50 formed between the rear side of front wall 22 the front side of inner sleeve 30 (Fig. 5). The match-mounted base(s) 42 are inserted to an intermediate depth of concavity 50 at a depth sufficient to align match heads 44 at a selected position relative to the upper front edge of inner sleeve 30. Although Fig. 5 shows match heads 44 at a position flush with the upper front edge of inner sleeve 30, it will be apparent to the skilled artisan that raising or lowering that



orientation may be desirable either to accommodate match shafts 42 of greater or lesser length, as well as to accommodate closure of the pack cover 14 without interference between matches 40 and pack cover 14. Match-mounted bases 42 are secured in position within concavity 50 with a drop or bead of adhesive 52,  
5 applied to either or both opposite sides of bases 42. Alternatively, a mechanical fastener such as a staple (not shown) may be employed for this purpose.

Accordingly, the smoker 11 may readily retrieve a cigarette 32 from the fully self-contained cigarette pack 12, and light the cigarette 32 using the integrally-contained match 40 by igniting it on the also-provided strike strip 46, thereby  
10 achieving the objects of the invention and overcoming important limitations of the related art.

**[0025]** With reference now to Figs. 6 and 7, a further embodiment of the present invention is disclosed. According to this embodiment, system 60 includes  
15 a cigarette pack 62 having a pack body 63 and pack cover 65. An important improvement is the integration of matches 64 within the planar construction of outer wall 66, whereby individual matches 64 are die-cut or otherwise formed to include a match shaft 68 extending to a match head 70. Accordingly, this construction eliminates the need for separate match-supporting bases 42, while  
20 providing slimmer packaging. As with the embodiment described in connection with Figs. 1-5, matches 64 are formed to extend to a preselected height 72 shown flush with upper end of inner sleeve 74 and width to accommodate the configuration of the cigarette pack 60 and the number of cigarettes to be packaged therewith. According to either embodiment, structural rigidity is retained and  
25 overall packaging parameters are maintained to be accommodated in prior art

display and vending racks.

**[0026]** It is to be understood that the present invention is not limited to the embodiments described above, but encompasses any and all embodiments within the scope of the following claims.